

facsimile

TRANSMITTAL

to: Erica Burton
fax #: U.S. Dept. Commerce/NOAA phone #: _____
re: Monterey Bay National Marine Sanctuary
date: 299 Foam Street
pages: Monterey, CA 93940

[Number of pages including this page]

from: _____ phone #: _____

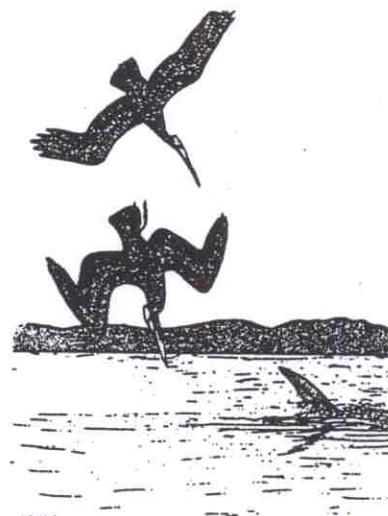
This is a request for assistance and note to people who rehabilitate and handle **brown pelicans** and to people who conduct beach walks and carcass counts, but who also encounter brown pelicans. We are interested in ages and sexes of birds that die and/or "get into trouble" in various parts of their total range. Our studies in the Gulf of California indicate that there is a sex-biased natural mortality, depending on geographic location. Not to explain things, but in short, this relates to patterns of natural and sexual selection (Palacios and Anderson, *Natural Selection and Sexual Dimorphism in the Brown Pelican*, ms in prep.). Just a minimal amount of effort from you will, once enough data are in, help us determine the patterns of mortality in different sexes and age-classes under different circumstances of death and/or other deleterious encounters at different geographical locations.

The attached forms will work for either live or dead birds. On the beaches, all you need to do is estimate the age by the feathers left and the sex by the bill measurement. For even just "piles of bones and feathers" found on the beach, all we need is **date, location, age (by plumage), and culmen length (use metric if possible, see attached sheets on how to measure the CUL).** The **short-tarsus (sTAR)** measurement is also useful if you can get it. **Weight** if the specimen is fresh. The instructions seem complicated, but aren't that difficult once you read through them. Attached are the necessary forms. Pass copies on to others who walk beaches and encounter dead birds.

And thank you in advance for your cooperation.

Daniel W. Anderson and Eduardo Palacios

Wildlife, Fish, and Conservation Biology
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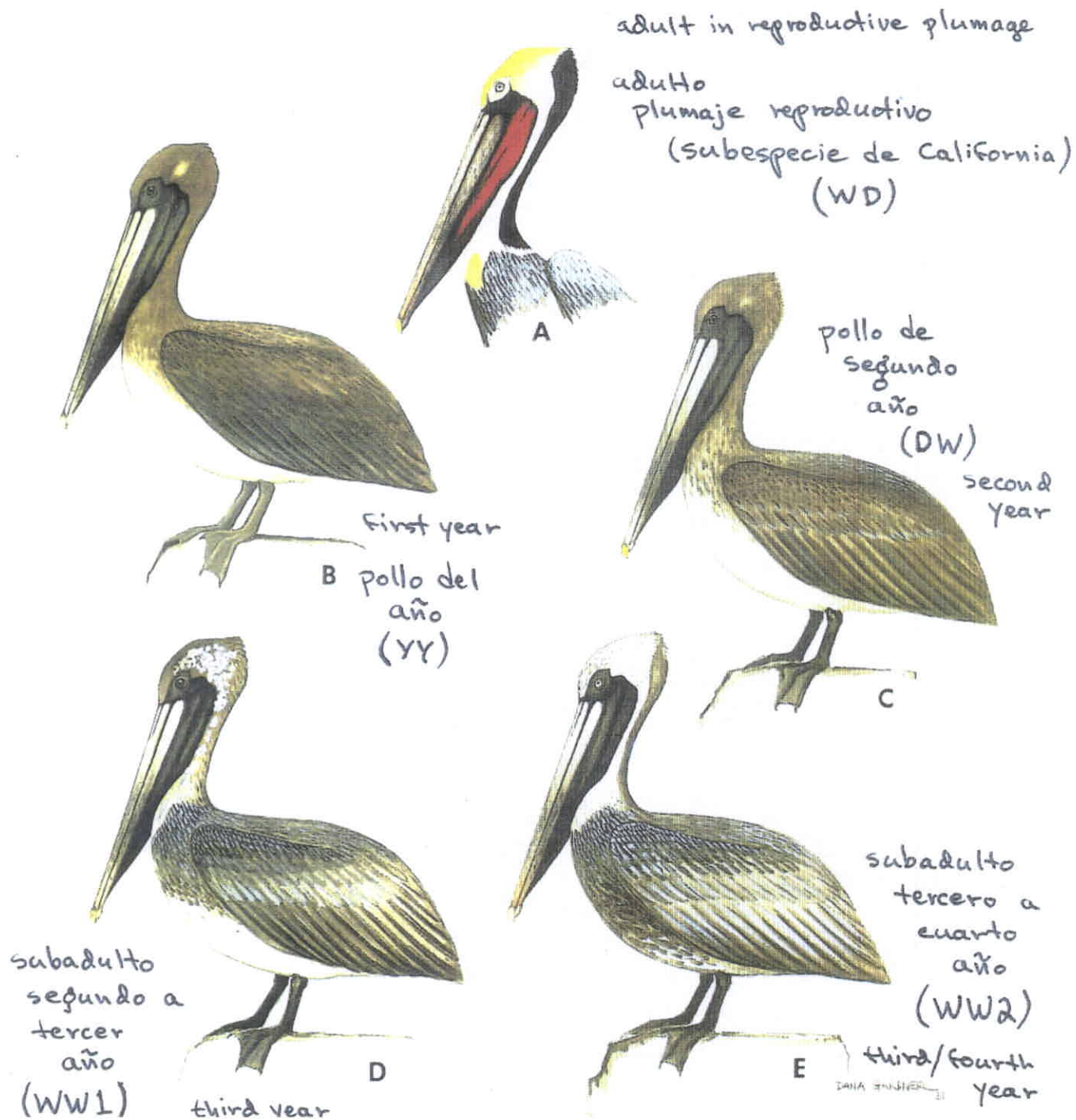


PLUMAGES AND MOLTS OF BROWN PELICANS

Ralph W. Schreiber, Elizabeth Anne Schreiber,
Daniel W. Anderson, and David W. Bradley

Contributions in Science, Number 402
Natural History Museum of Los Angeles County
14 March 1989

AGE VARIATION IN BROWN PELICANS (B→C→D→E→A):



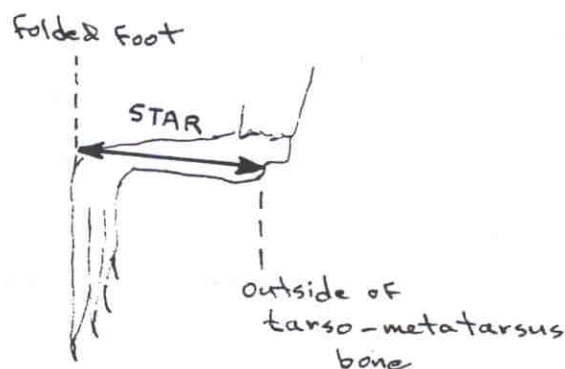
GENERAL INSTRUCTIONS:

Footnotes to the data form:

U = unknown in any column. The **most important** measurements are Date, Location, Age, Culmen, and condition—the others are supplemental.

*For expression of "age", use YY, DW, WW1, WW2, and WD (see att. 1).

+Measure "Culmen" (CUL) and "short-tarsus" (sTAR) in cm as shown below:



**Express "Condition" (Cond) as: Os = oiled slightly, Om = oiled moderately, Oh = oiled heavily; Tr = trauma injury; Fh = fish hook injury, Fe = fishing line injury or entanglement; Em = emaciated, Lw = light weight; Ot = other (explain in remarks section); U = unknown.

#Express "Cause" as: Sp = oil spill, Uo = unknown oil source; In = intentional injury, Ac = accidental injury; F = found that way; Ot and U = as above.

##Express "Fate" as: RR = rehabilitated and released, Eu = euthanized, FD = found dead originally, DC = died in captivity or handling, RE = released at site without treatment; Ot and U as above.

The last column is just the sequential number for that date; write in "additional remarks and notes", the name of the contact person and the name of the facility; place additional information there or on an additional sheet and send original or a copy to:

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C:/forms/bchcast.wpd

BROWN PELICAN MEASUREMENTS FOR BEACH-CASTS AND REHABERS

[illegible]

Additional Remarks and Notes: